DOCUMENT RESUME

ED 225 085 CG 016 433

AUTHOR Peters, Lawrence H.; Rudolf, Cathy J.
TITLE Embedding Performance Appraisal within an Organizational Context.
PUB DATE Aug 82
NOTE 16p.; Paper presented at the Annual Convention of the American Psychological Association (90th, Washington, DC, August 23-27, 1982).
PUB TYPE Information Analyses (070) -- Reference Materials - Bibliographies (131) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Difficulty Level; Employees; Employers; *Evaluation Criteria; Evaluation Methods; *Motivation; *Organizational Climate; Organizations (Groups); *Performance Factors; *Psychometrics; Research Methodology; State of the Art Reviews
IDENTIFIERS *Performance Appraisal; *Situational Variables

ABSTRACT

The literature on the partial determinants of performance in organizational contexts, particularly the research on situational determinants, suggests several different variables which may be of importance to appraisal processes as well. This point may be exemplified with regard to the situational factors of task ease/difficulty and situational performance constraints. The importance of contextual factors for understanding the performance appraisal process and evaluating appraisal instruments is critical. The relevance of such contextual variables in the determination of the degree to which rating procedures are susceptible to halo and leniency errors must also be noted. When using contextual information in the evaluation of performance appraisal instruments, it will be necessary to first identify important situational characteristics which exert a strong influence on both mean levels and distributions of observed performance as well as other variables that impact on performance. (JAC)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED225085

Embedding Performance Appraisal Within An Organizational Context

Lawrence H. Peters
Southern Illinois University

Cathy J. Rudolf
University of Texas at Arlington

Paper Presented at the
1982 Annual Meetings of the
American Psychological Association

Washington, D.C.

August, 1982

CG 016433

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Lawrence H. Peters

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Embedding Performance Appraisal Within an Organizational Context

The recent literature in the performance appraisal area has been marked by its emphasis on psychometric properties of rating scales. This emphasis is reflected in the plethora of studies which attempt to either (1) demonstrate the usefulness of one type of rating scale over others (e.g., Borman & Dunnette, 1978; Latham & Wexley, 1977) or (2) delineate the value of training on the quality of performance ratings (see Spool, 1978, for a recent review). This emphasis on psychometric issues clearly reflects the underlying assumption that the major problems and issues in performance appraisal are psychometric in nature. While such an assumption undoubtedly is partially true, it, in and of itself, provides a very limited base on which to extend our understanding of the performance appraisal process. The need to broaden the base for future work in the performance appraisal area is often expressed. Kane and Lawler (1979), for example, have noted that "a great deal, indeed most, of the research on performance appraisal has focused on the development of better measurement instruments. So far, this effort has not paid off..." (p. 458).

This is not to say that concern with psychometric issues has not been of value. Such concerns have been, and will continue to be, of importance. It is to say, however, that new directions for explaining relevant variance in the performance appraisal area, and thus, for significantly increasing our understanding of the appraisal process itself, must await such a broadened perspective.

One approach to broadening this perspective is to view performance appraisal as more than simply an interaction between a person (i.e., a rater) and a rating form. It is evident that appraisal takes place within the context of an organizational setting. The organizational context in which performance appraisal systems are embedded, however, has not received the attention it fully deserves (Borman, 1978; Kane & Lawler, 1979; Wood & Mitchell, 1981).

Recognizing that the evaluation of individuals' contributions and the context in which those contributions are made are inseparable serves two important purposes. First, it is only when one views the appraisal process in its entirety, to include the context in which such ratings occur, that the futility of continued research aimed solely at developing "better rating scales," as evidenced by reduced psychometric error, becomes clear. Second, by viewing performance appraisal from a broadened, organizational perspective, one is directed to the potential usefulness of the organizational literature on performance.

We do not wish to state that situational or contextual factors have been totally ignored. This clearly has not been the case (see, for example, Kane & Lawler, 1979; Landy & Farr, 1980; McCall & DeVries, Note 1; Mitchell, Note 2). For example, McCall and DeVries (Note 1) suggested five situational factors which were argued to influence the effectiveness of appraisal systems at managerial levels. These factors included the nature of managerial work, organizational characteristics, the meaning of and individual control over performance, environmental demands, and day-to-day relationships. In a more general vein, both

Kane and Lawler (1979) and Landy and Farr (1980) have recently reviewed literature which points to the importance of situational variables in performance appraisal. These reviewers included such factors as administrative characteristics (e.g., the purpose, frequency, and feedback of appraisals), task characteristics (e.g., role ambiguity, interdependence, etc.), position characteristics (e.g., organizational level, line versus staff, etc.), and organizational characteristics (e.g.,span of control, organizational size, etc.) as important determinants of appraisal effectiveness. More recently yet, Mitchell (Note 2) discussed the role of contextual factors in performance appraisal by hypothesizing how such variables might impact upon persons' motivation and performance as well as their appraisal. In so doing, Mitchell (Note 2) took a larger, organizational perspective of the performance appraisal issue and, as a result, was able to speculate on the impact of specific situational factors (e.g., task, environmental and social context factors) on specific outcomes (i.e., motivation, performance, or appraisal).

The present paper was designed to further exemplify how situational factors might impact on performance appraisal. Like Mitchell (Note 2), we felt it imperative to start with theoretical notions concerning hypothesized determinants of performance as a basis for identifying situational factors which also might be important for performance appraisal. Unlike Mitchell, however, our purpose is not to develop an integrated performance model which incorporates these contextual variables. Rather, our purpose is to start from a theoretical base of performance determinants and show how variables relevant to understanding, predicting and controlling performance per se might also be relevant for the appraisal of that performance. In particular, the purpose of this paper is to explore the impact of contextual factors on the evaluations of rating scales based on psychometric properties. Thus, our goal is to link the impact of contextual factors with the major theme within recent literature in performance appraisal, that of evaluating performance appraisal instruments.

The literature on the partial determinants of performance in organizational contexts, particularly the research on situational determinants, suggests several different variables which may be of importance to appraisal processes as well. In the present paper, we will exemplify this point with regard to the situational factors of (1) task ease/difficulty and (2) situational performance constraints. These, and other, contextual factors may be identified from the existing literature due to their demonstrated direct and indirect relationships to performance.

Of importance to the following discussion is the fact that these contextual factors not only influence <u>mean</u> levels of observed performance, but also the <u>distribution</u> (e.g., skew, kurtosis, variance) of observed performance. That is, while making a work task an easier one to accomplish and removing severe constraints can be expected to have a positive impact on the observed mean levels of performance in given work settings, such changes can also be expected to have a concomitant <u>distributional</u> effect (see discussion, below). Since both mean levels and distributional effects might be anticipated from changes

in situational characteristics of this sort, one might further anticipate that such variables would have an impact on the appraisal process as well. In particular, we would like to argue that the evaluation of rating scales, based on psychometric properties such as leniency and halo error, depends upon the context in which such evaluations take place. In other words, our evaluation of rating scales, just like performance itself, is always dependent upon the context in which it is done. We will exemplify this important point below with regard to the previously mentioned situational factors of task ease/difficulty and situational performance constraints.

Distributional Effects Attributable to Contextual Factors

Task Ease/Difficulty. The difficulty level of the task being performed has been of interest to a variety of researchers and theorists over the years. Clearly, this variable has a direct impact on performance. For example, holding motivation levels constant, increasingly more difficult tasks should result in increasingly poorer performance as persons are no longer able to successfully utilize appropriate abilities.

In addition to this direct effect on performance, task variables also have been hypothesized to affect performance indirectly, through motivation. For example, task difficulty is an important component in Achievement Motivation theory (McClelland, 1961). In a related fashion, the difficulty of a task corresponds to the probability that the task can be successfully accomplished, and therefore, underlies the constructs of goal difficulty (Locke, 1968) and expectancy (Vroom, 1964). As a final example, work in the task redesign area often has as its goal the need to make routine tasks more personally challenging (Herzberg, Mausner, & Snyderman, 1959; Hackman & Lawler, 1971; Hackman & Oldham, 1975).

While predictions regarding the impact of task difficulty on motivation differ across theories (e.g., achievement motivation theory versus goal theory), they all agree that task characteristics represent important influences on motivation. Further, as one approaches the extremes along the task ease/difficulty dimension (i.e., very easy or very difficult tasks), there is substantial agreement, across theories, in the prediction of motivation levels. For example, low levels of motivaton would be predicted by all theories for persons working on extremely difficult tasks. Such tasks would deviate markedly from the .50 probability of success situation deemed most appropriate for positively influencing the motivaion of persons with a strong need for achievement. Within goal theory, such difficult tasks might be expected to be rejected. Since it is only difficult goals which are personally accepted which are expected to have a positive influence on performance, such difficult task settings should result in low levels of motivation. Experience on difficult tasks might also cause workers to have less faith in their ability to accomplish the required tasks based on their personal efforts, resulting in low expectancy beliefs. Finally, tasks which are very difficult cannot be considered to promote challenge, a key construct underlying the job redesign area.

In all of these examples, task difficulty is seen as a key component underlying persons' motivation to perform a task well. Given the well accepted impact of motivation on performance, we can, therefore, identify task ease/difficulty as having an indirect, as well as direct, influence on performance. Thus, we have an example of a situational variable which has strong implications for how well persons can be expected to perform their jobs. These performance implications can be extended to the appraisal area by noting the distributional effects that can be hypothesized for this variable. These hypothesized distributions for tasks which are either very easy or very difficult are given in Figure 1.

Insert Figure 1 About Here

As depicted in this figure, mean levels of performance clearly vary with the difficulty of the task. This mean difference, of course, defines the construct of task difficulty. Of importance to the present discussion are the distributions depicted in this figure. For both very easy and very difficult tasks, we can anticipate that little variance in performance will exist. If the assigned task is "easy," then most people, regardless of ability differences, can be expected to do it well -- that is why we call it an easy task. If the assigned task is "difficult," then most people, regardless of ability differences, can be expected to do it poorly. Again, difficult tasks are defined as those for which the likelihood of success is low. The effect of extremely easy or extremely difficult tasks, therefore, is to restrict the variance in performance around a very high (easy task) or very low (difficult task) mean level. We can anticipate less extreme, but similarly restricted variance effects at less extreme levels of task ease/difficulty. A distribution with maximum variance could be expected only at moderate levels of task difficulty.

Situational Constraints. Several theoretical models of performance (e.g., Campbell & Pritchard, 1975; Dachler & Mobley, 1972; Terborg, 1977) have included the notion that performance is sometimes inhibited by situational factors beyond a person's control. More recently, with Ed O'Connor, we have initiated a systematic research program designed to explore the impact of such inhibiting situational factors on persons' behavioral and affective responses (see Peters & O'Connor, 1980). Early empirical efforts (Peters, O'Connor, & Rudolf, 1980; Peters, Chassie, Lindholm, O'Connor, & Rudolf, Note 3) have clearly shown the impact of such constraining factors, not only on performance, but also on task satisfaction and frustration. Of importance to this discussion are the facts that situational constraints (1) have been shown to affect performance and (2) can be expected to produce different performance distributions depending upon their severity. Figure 2 depicts the distributional effects hypothesized for severely constraining work factors, holding other factors constant.

Insert Figure 2 About Here

As seen in this figure, severe constraints are expected to restrict the variance in performance. This was hypothesized (see Peters & O'Connor, 1980) to occur due to the more negative impact of constraints on the performance of high ability persons as compared to low ability persons. In effect, severe constraints were hypothesized to "lower the ceiling" on the potential performance of high abilitiy persons while, at the same time, have little effect on the performance of their low ability counterparts. This restricted variance hypothesis has been upheld in one (Peters et al., Note 3) of two laboratory studies, where a strong manipulation of constraints was accomplished.

In addition to this direct effect on performance, constraints have been hypothesized to have an indirect effect on performance through the construct of motivation. For example, Peters and O'Connor (1980) hypothesized that situational constraints might exert an indirect influence on performance, via motivation, due to lowered success expectations, especially for high ability individuals accustomed to success. This effect would be evidenced by restricted performance variance as well.

Implications for Evaluating Performance Appraisal Instruments

The point of the above discussion is simply that several of situational factors have been identified for their impact on mean levels of performance. These and other situational factors are clearly documented in the organizational literature. Since the impact of such situational variables can be extended to include performance distributions as well as mean levels, such variables might also be expected to have an impact on the quality of data received in the evaluation of performance appraisal instruments. In particular, we can expect the context in which performance appraisals take place to impact on our evaluation of (a) leniency error and (b) halo error. This is due to the fact that the determination of such psychometric issues is highly dependent upon existing performance distributions.

Leniency Error. Consider the "constant error" called leniency error. In most settings, leniency is determined by assessing the extent to which the average rating exceeds the mid-point on the rating scale. Thus, if seven point rating scales are utilized, than an average rating of greater than 4 (the scale mid-point) would be considered evidence of leniency error. In comparing one type of rating scale to another (e.g., BARS to graphic rating scales), the scale with the most extreme positive rating would be considered to be most sensitive to this type of rating error. In like manner, if one scale produces an extreme negative mean rating, it would be concluded that it produced "severity error", the opposite of leniency error. Such conclusions, however, do not take into consideration the context in which the ratings were made, and therefore, may be decidedly erroneous.

We have just provided two examples of how contextual factors might invalidate such conclusions. In these examples, the mean level of the distribution of observed performance was hypothesized to vary as a function of situational factors. Thus, we can anticipate higher performance means in work settings in which the task is relatively easy and constraining work factors are absent. In like manner, work settings in which the tasks are relatively difficult and constraining work factors are present should produce lower performance means. What, exactly, is the point on the rating scale which defines leniency when, due to the ease of the task, everyone can be expected to do well? At what point on the rating scale do we differentiate between severity error and a task which is severely constraining? Clearly, the mid-point on the scale would be inappropriate. Further, when comparing two types of rating scales, which is to be considered more prone to produce leniency error on very easy tasks or more prone to produce severity error on very constraining tasks? The one with the most extreme mean rating scores may well reflect more <u>accurate</u> as opposed to more lenient (or severe) ratings!

<u>Halo Error</u>. Halo error is often defined as the extent to which one prominent characteristic of a person, or an overall evaluation, influences the ratings of that same person along other dimensions. Most often, halo is evaluated by assessing the extent to which conceptually distinct performance dimensions show non-zero correlations. To the extent that strong correlations emerge, ratings are said to reflect halo.

While recent arguments suggest that non-zero correlations among different performance dimensions might be expected due to the hierarchical nature of human abilities (see Hulin, 1982), it still becomes tenuous to conclude that halo is present to any degree without information about important contextual factors. In particular, we would argue that the restricted variance produced on tasks which are extremely easy, difficult or constraining contributes to the non-zero correlations commonly observed across dimensions of a typical performance appraisal. This follows from the fact that variance restriction reduces the differences that are observable among persons.

This reduced differentiability, in turn, makes ratings of these same persons less clear cut. To the extent that the situation (i.e., very easy, difficult or constraining tasks) promotes ambiguity of this sort, the rater, when faced with the task of describing ratees on a series of rating scales, may well rely upon particular distinguishing charactersitics of the ratees or on an overall impression of the ratee to make these multiple judgments. In this sense, contextual factors may contribute to "halo error" in one work setting but not in others. In effect, we must ask exactly what is to be considered a reasonable level of interdimension correlation when contextual factors act to restrict variance, thereby making ratees less readily distinguishable and requiring raters to rely on personal sources of information (i.e., a distinguishing characteristic or overall evaluation) to make his/her ratings. For this reason, the determination of the extent to which given rating scales "produce" halo is problematic.

General Conclusions and Implications

In the present paper, we chose to examine how situational factors which have a known impact on performance might impact on a traditional topic within the performance appraisal area, that involving psychometric properties of rating scales. To the extent that such factors exert a strong influence, research designed to compare different rating scales based on psychometric properties will be problematic. It simply is not straightforward to always conclude that mean ratings above the mid-point on a given rating scale must reflect leniency or that strong interdimension correlations must reflect deficiencies in the scaling techniques. One, therefore, must be mindful of extreme situations (e.g., very easy, difficult or constraining work settings) when evaluating the psychometric soundness of existing and/or new rating procedures.

Given that situational factors represent important considerations in the evaluation of rating scales, several implications follow. In each case, we recognize that it will be necessry to first identify important situational characteristics which exert a strong influence on both mean levels and distributions of observed performance. We would suggest that the identification of additional variables proceed based on our current understanding of those situational factors which have been shown to have an impact on performance. For example, additional situational factors might well include performance contingent reward systems and performance-relevant group norms. The impact of such variables on mean levels of performance is established. Since both of these variables are also likely to have an effect on observed performance distributions, they are probable candidates for having an impact on the appraisal process as well. These and other situational variables might be identified to affect the appraisal process, and thus, influence our evaluation of the relative usefulness of various rating procedures.

Given that relevant situational factors can be identified and their individual and joint influences on performance distributions learned, then three primary implications follow. First, we might use this information to identify situations which should be modified. We are not arguing that wholesale change programs be implemented for the sake of evaluating rating scales. We are suggesting that situational factors might contribute to some of the psychometric errors often observed. To the extent that it is important to avoid such errors because of their impact on applied human resources decisions, however, change efforts might be warranted. For example, we have suggested that situational characteristics which produce minimal performance variance contribute to halo error. To the extent that dimensional ratings, free from halo, are necessary for making decisions about the differential treatment of the organization's human resources, then change efforts designed to produce relevant variance in performance through appropriate modification of the work setting might be useful.

Second, this information can aid us in choosing research settings for scale development purposes. Thus, when evaluating leniency, for example, we would choose work settings in which the tasks to be

performed are neither too easy nor too difficult, making the determination of leniency error, using the scale midpoint, more accurate.

Finally, if the setting cannot be appropriately chosen or modified, such information might still be useful to the extent that it allows us to anticipate the performance distribution the situational factors are likely to produce. For example, as described earlier, very easy tasks should produce negatively skewed distributions and very difficult tasks should produce positively skewed distributions. To the extent that distributional effects such as these can be associated with different situational factors, individually or in combination, then we should be better able to interpret the statistics obtained from new rating scales with regard to rating errors relative to this "known" distribution. At the least, it should be incumbent on the researcher to fully describe the context in which the evaluation research is being conducted and justify his/her interpretation of statistics in light of extreme situational conditions.

The impact of situational factors such as task ease/difficulty and situational constraints can be extended in a variety of directions. The focus here has been on the impact of situational characteristics on performance distributions, and the relevance of this impact for evaluating performance appraisal instruments.

Although not the emphasis here, it is clear that situational variables can have an influence in other ways on the performance appraisal process. The effects of the work context on rated performance, for example, is an area that Mitchell (Note 2) has recently begun to develop. The impact of varying situational factors on causal attributions made to "explain" the performance of others is yet another avenue which might be meaningfully explored. Situational factors, therefore, can help to explain both performance ratings and the underlying meaning that raters assign to them. In this sense, the broadened perspective provided by viewing the appraisal process from an organizational context should greatly enhance our knowledge of that process. This broadened perspective, for example, allows one to speculate on the extent to which raters "carry" performance distributions in their heads based on their perceptions of such situational factors as task difficulty, and use this information in their appraisals of others and in the attributions they make to explain others' rated performance levels. The further development of this line of reasoning must follow from the accumulated organizational literature on partial determinants of performance. Thus, we are suggesting the need to embed performance appraisal within an organizational context.

Reference Notes

1. McCall, M.W., & DeVries, D.L. Appraisal in context: Clashing with organizational realities. Paper presented at the 84th Annual Meetings of the American Psychological Association, Washington, D.C., September, 1976.

2. Mitchell, T.R. The effects of social, task and situational factors on motivation, performance and appraisal. Paper presented at a conference on "Performance Measurement: Directions for the Future," Dallas, TX., November, 1981.

3. Peters, L.H., Chassie, M.B., Lindholm, H.R., O'Connor, E.J., & Rudolf, C.J. The joint influences of situational constraints and goal setting on performance and affective outcomes. Paper preented at the 1981 Annual Meetings of the Southwest Academy of Management, New Orleans, LA., March, 1981.

References

Borman, W.C. Exploring the upper limits of reliability and validity in job performance ratings. Journal of Applied Psychology, 1978, 63, 135-144.

Borman, W.C., & Dunnette, M.D. Behavior-based versus trait-oriented performance ratings: An empirical study. Journal of Applied Psychology, 1975, 60, 561-565.

Campbell, J.P., & Pritchard, R.D. Motivation theory in industrial and organizational psychology. In M.D. Dunnette (Ed.), Handbook of industrial and organizational psychology. Chicago: Rand-McNally, 1976

Dachler, H.P., & Mobley, W.H. Construct validation of an instrumentality-expectancy-task goal model of work motivation: Some theoretical boundary conditions. Journal of Applied Psychology, 1973, 58, 397-418.

Hackman, J.R. & Lawler, E.E. Employee reactions to job characteristics. Journal of Applied Psychology Monograph, 1971, 55, 259-286.

Hackman, J.R. & Oldham, G.R. Development of the job diagnostic survey. Journal of Applied Psychology, 1975, 60, 159-170.

Herzberg, F., Mausner, B., & Snyderman, B. The motivation to work. New York: Wiley, 1959.

Hulin, C.L. Some reflections on general performance dimensions and halo rating error. Journal of Applied Psychology, 1982, 67, 165-170.

Kane, J.S., & Lawler, E.E. Performance appraisal effectiveness: Its assessment and determinants. In B. Staw (Ed.), Research in organizational behavior, Vol. 1, Greenwich, Conn.: JAI Press, 1979.

Landy, F.L., & Farr, J.L. Performance rating. Psychological Bulletin, 1980, 87, 72-107.

Latham, G.P., & Wexley, K.N. Behavioral observation scales for performance appraisal purposes. Personnel Psychology, 1977, 30, 255-268.

Locke, E.E. Toward a theory of task motivation and incentives. Organizational Behavior and Human Performance, 1968, 3, 157-189.

McClelland, D.C. The achieving society. Princeton, N.J.: Van Nostrand, 1961.

Peters, L.H., & O'Connor, E.J. Situational constraints and work outcomes: The influences of a frequently overlooked construct. Academy of Management Review, 1980, 5, 391-397.

Peters, L.H., O'Connor, E.J., & Rudolf, C.J. The behavioral and affective consequences of situational variables relevant to performance settings. Organizational Behavior and Human Performance, 1980, 25, 79-96.

Spool, M.D. Training programs for observers of behavior: A review. Personnel Psychology, 1978, 31, 853-888.

Terborg, J.T. Validation and extension of an individual differences model of work performance. Organizational Behavior and Human Performance, 1977, 18, 188-216.

Wood, R.E. & Mitchell, T.R. Manager behavior in a social context: The impact of impression management on attributions and disciplinary actions. Organizational Behavior and Human Performance, 1981, 28, 356-378.

Vroom, V.H. Work and motivation. New York: Wiley, 1964.

Footnotes

1. We would like to thank Donald Campbell, Cynthia Fisher, and William Vicars for their thoughtful comments on an earlier draft of this manuscript.

2. This discussion might be extended to other psychometric properties as well. It would not be surprising to find psychometric characteristics such as interrater reliability to also be affected by situational factors. Thus, to the extent that the situation does not allow for a clear determination, across raters, of the rank ordering of persons due to variance restriction, increased measurement error and associated decreased interrater reliability might be anticipated.

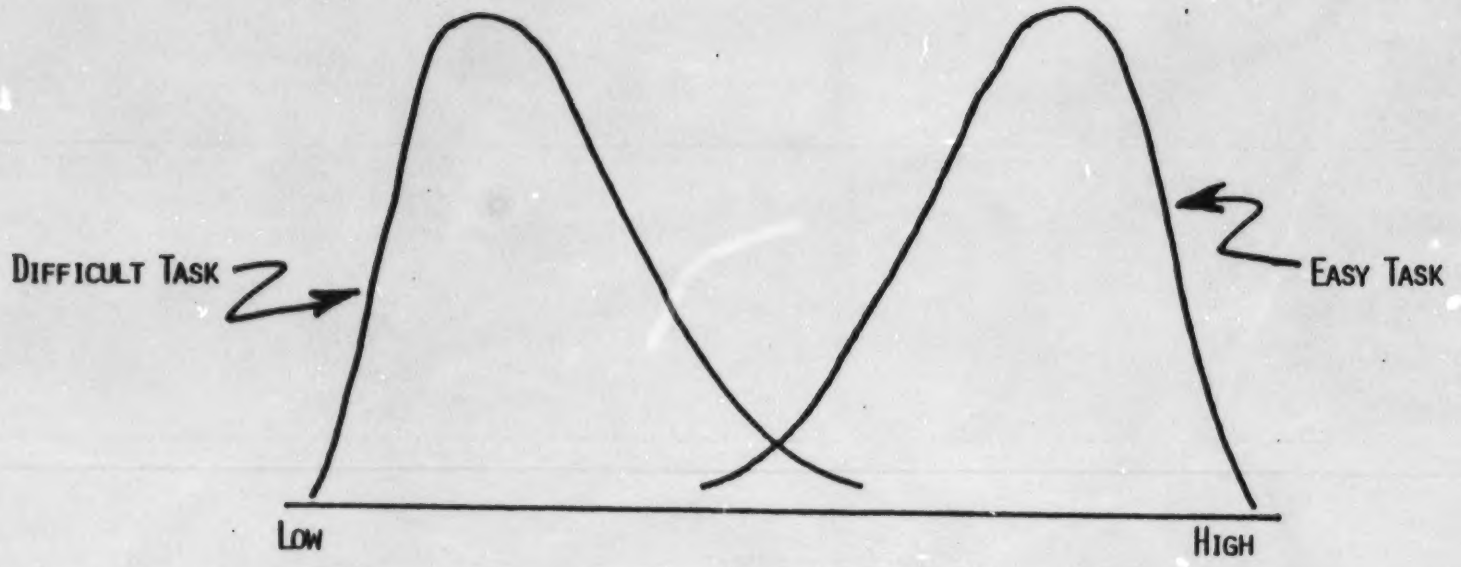

FIGURE 1. HYPOTHESIZED PERFORMANCE DISTRIBUTIONS ON VERY EASY AND VERY DIFFICULT TASKS

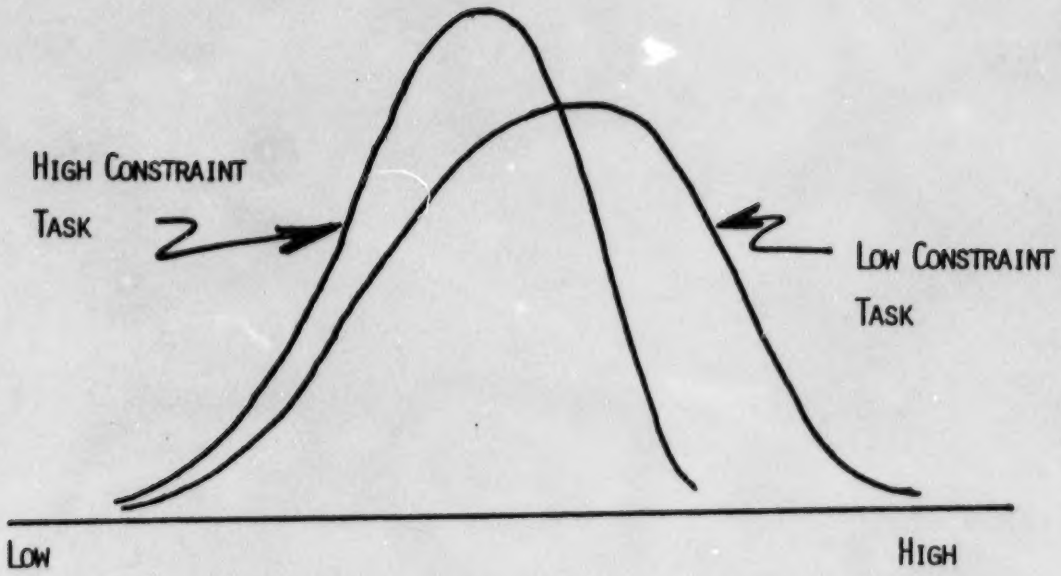

Figure 2. Hypothesized Performance Distributions on Tasks With and Without Severe Situational Constraints